

**Notice of Allowability**

Application No.

10/033,204

Examiner

Pierre-Michel Bataille

Applicant(s)

TIAN, LIJUN

Art Unit

2186

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/14/06.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 1-27 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The present invention features a circuit having a hardware-based adaptive differential pulse code modulation (ADPCM decoder).

Closed related prior art teaching similar correlating features, including:

JP 09074377 A (Miyamoto) teaching demodulated ADPCM codes are inputted to a feature extraction device and features of voice information are extracted by the feature extraction device, the ADPCM codes feature-extracted and replaced through the feature extraction device are decoded to PCM signals by an ADPCM decoder, the feature information of the voice extracted by the feature extraction device, the information of several frames are stored in a memory and the information stored in the memory is read in every constant cycle and updated as required.

US 5,764,941 (Goto et al) teaching Operating circuit and operating method for processing signals in ADPCM system sequentially carrying out calculations according to the command codes in a command ROM, wherein the operating circuit comprising the command ROM (read only memory) for storing a content of a program, a program counter for appointing an address to said command ROM, a command decoder for decoding a content of said command ROM appointed by said program counter.

However, none of the prior art of record teaches or suggests the features of the claims taken in light of the specification, specifically:

***a memory storing both programming instructions and ADPCM encoded source file data; and***

***a micro-controller having an architecture that implements time multiplexed memory addressing wherein ADPCM encoded source file data is extracted from the memory and delivered to the ADPCM decoder for processing in a first cycle, and wherein programming instructions are extracted from the memory and executed by the micro-controller in a second cycle while the hardware-based ADPCM decoder continues processing of the previously extracted ADPCM encoded source file data.***

These features recited in the independent claims 1, 11, 15, and 21 render the claims allowable. Dependent claims 2-10, 12-14, 16-20, and 22-27, further limiting the dependent claims, are allowable for the reasons as noted above.

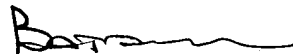
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (8:00A to 4:30P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Pierre-Michel Bataille  
Primary Examiner  
Art Unit 2186

October 26, 2006

**PIERRE BATAILLE**  
**PRIMARY EXAMINER**